

REMARKS

Claims 1-17 are now pending in the application. Claims 15-17 are new claims. The Examiner is respectfully requested to reconsider and withdraw the rejection(s) in view of the amendments and remarks contained herein.

REJECTION UNDER 35 U.S.C. § 102

Claims 1, 5-8, and 12-14 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Bruder et al. (U.S. Pat. Publication No. 2003/00724129A1). This rejection is respectfully traversed.

With respect to independent claim 1 and dependent claim 8, the Examiner asserts that paragraph [0059] of Bruder teaches "... a device (22) for moving the divergent radiation source and the radiation detector relative the object while each of the line detectors is adapted to record a plurality of line images of radiation as transmitted through the object in a respective one of the plurality of different angles" and further argues that paragraph [0064] of Bruder teaches "moving the divergent radiation source (2) and the detector (5) relative the object essentially linearly in a direction essentially orthogonal to the axis of symmetry with a support mechanism (9) displaceable parallel to the system axis Z." Applicants respectfully submit that this assertion is incorrect.

In particular, Applicants respectfully submit that Bruder discloses a computer tomography method wherein the rotary frame 7 can be placed into rotation around the system axis Z by a drive 22. The system axis Z proceeds parallel to the z-axis of a spatial rectangular coordinate system shown in FIG. 1 and discussed in paragraph [0062]. In order to be able to

introduce an examination subject, for example a patient, into the beam path of the x-ray beam, a support mechanism 9 is displaceable parallel to the system axis Z, i.e. in the direction of the z-axis, with a synchronization between the rotational motion of the rotary frame 7 and the translational motion of the support mechanism 9 that causes the ratio of translational to rotational velocity to be constant.

As a result, the moving device disclosed by Bruder causes the divergent radiation source and the radiation detector to be moved relative to the object in a spiral helical movement and not an essentially linear movement. The Examiner's attention is directed at least to paragraphs [0004], [0014], [0015], [0051], [0065] and [0066] as well as Fig. 3 of Bruder.

Bruder thus fails to disclose a device for moving a divergent radiation source and a radiation detector relative to an object essentially linearly in a direction essentially orthogonal to an axis of symmetry. Accordingly, Applicants respectfully submit that independent claim 1 is allowable for at least this reason.

Still further, as a result of the movement distinction discussed above (spiral helical versus essentially linear) the line detector angles of independent claim 1 are different from the line detector angles of Bruder. In particular, in independent claim 1, each line detector is oriented at a fixed angle with respect to a central axis (different line detectors are arranged at different angles, for example angles $\alpha_1, \alpha_2 \dots \alpha_N$, as shown in Fig. 1). When the detectors move linearly, each line detector scans over an object and repeatedly detects instantaneous one-dimensional images, each time at the respective fixed angle. As a result, a number of two-dimensional images are created. For example, line detector 1 may create the image shown in Fig. 2A, ...line detector N may create the image shown in Fig. 2N).

In contrast, in Bruder, each line detector is moved relative the object in the helical movement, whereupon the angle between the line detector and the central axis is varied, and thus, each line detector repeatedly detects instantaneous one-dimensional images, each time at a different angle. Accordingly, Applicants respectfully submit that independent claim 1 is allowable for at least this additional reason. Applicants further respectfully submit that independent claim 13 is allowable for similar reasons. Applicants further respectfully submit that dependent claims 5, 8, 12 and 14 are allowable by virtue of their dependency on allowable independent claims 1 or 13 for at least the reasons set forth above.

REJECTION UNDER 35 U.S.C. § 103

Claims 2-4 and 9-11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Bruder et al. (U.S. Pat. Publication No. 2003/00724129A1). This rejection is respectfully traversed.

Applicants respectfully submit that dependent claims 2-4 and 9-11 are allowable by virtue of their dependency on allowable independent claim 1, for at least the reasons set forth above.

CONCLUSION

Accordingly, in view of the above amendments and remarks, reconsideration of the objections and rejections and allowance of each of claims 1-17 in connection with the present application is earnestly solicited.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact John A. Castellano at the telephone number of the undersigned below.

Respectfully submitted,

By: 

John A. Castellano, Reg. No. 35,094

P.O. Box 8910

Reston, Virginia 20195

(703) 668-8000

JAC/krf